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THE EFFECT OF SPECIAL ACTIVITY EDUCATION PROGRAM APPLIED IN SPECIAL EDUCATION REHABILITATION CENTERS TO FEMALE STUDENTS

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Abstract:

Subject of the Study: The purpose of this study is to search the effect of "Special Activity Education Program" applied to female students studying in Special Education Rehabilitation Centers to physical parameters of these students.

Material and Method: 28 female students having special education attended to the study. These students aged 8-16 were divided into groups as 8-10, 11-13 and 14-16 aged and they were included to the study.

For the study "Special Activity Education Program" was prepared with Academic Members in Faculty of Sports Sciences and Physical Education Teachers from Special Education Schools. The program was applied in 12 weeks, 3 days in a week and 50-60 minutes in a day.

Before and after the study, Eurofit Tests (25 meter Sprint Test, Flamingo Balance Test, Touching the Discs Test, Sit and Reach Flexibility Test, Standing Long Jump Test, Right-Left Handgrip Test, Sit-Ups in 30 seconds Test, Bent Arm Hang in 30 seconds Test, Vertical Jump Test, 10x5 meter Shuttle Run Test) and Anthropometric Tests (Length and Body Weight) were applied.

Analysis: Gained data were analyzed by SPSS.16 program and were commented by finding arithmetic mean, minimum and maximum values and SS values.

Findings and Results: According to pretest and posttest results of the study; significant data were found from pretest and post test results of Flamingo Balance Test, Sit and Reach Flexibility Test, Standing Long Jump Test, Right Handgrip Test, Sit-Ups in 30 seconds Test, Bent Arm Hang in 30 seconds Test, Vertical Jump Test of Eurofit Tests ($p>0.05$). However, no significant data were found from 25 meter Sprint Test, Touching the Discs Test,10x5 meter Shuttle Run and Left Handgrip Tests ($p>0.05$).

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Keywords: special education, rehabilitation, Eurofit tests, female students

1. Introduction

Special education is defined as individually planned and a set of educational services aimed to maximizing the possibility of the individual living independently and is provided to students who differ significantly from average student characteristics. (1) In our country recently, multidirectional work which is about in different areas of integrating and bringing in society disabled people are done. (2)

Cratty (3) recommended that physical education activities which are applied to disabled children minimize the emotional and muscle tension and make improvement in IQ levels. Ninot et al (4) recommended giving a place to physical education and sports activities in programs which are applied to disabled and also recommended doing these exercises with physical educations. There are many studies which are about to improve the physical, physiological and motoric characteristics of educable mental disabilities.

Leisure time requirements for mental disabled children are same with non-disabled. In general these requirements are the activities of relaxing, resting, fun, recognition, learning, gaining experience, being together, communication with other people, creativity etc.

Nolan et al (5) said that the significant developments are seen in disabled students' behaviors who are regularly attending to physical education classes. When interaction opportunities are provided to students with special needs with their peers, they are able to learn to show appropriate social behavior, to develop friendships and cooperate.

Despite the fact that as a society it is not necessary to discriminate between girls and boys, girls are still not able to have enough opportunities in playing games with boys in same area and equal terms, in exercising and being in activities. Playgrounds and materials and also ignorance in this regard of families reveal same obstacles. Especially the difference in upbringing as a boy-girl who is the age of development and being children with special education needs increase the importance of subject one more time.

Our study are planned and applied with taking these subjects into consideration. Seminars about these subjects are giving to volunteer students to raise awareness. We believe that with this purpose, our study will be useful for girls who needs special education and for children's social, cultural and psychological.

2. Material and Method

28 girl students who take special education were attended to the research. Participants who are between 8-16 age were included in the study by 8-10, 11-13, 14-16 aged. With meeting students' parents, their participation provided as a volunteer. The parent

permissions were taken. The information meeting about research was done. The seminars about how to communicate, behave with students and special education program were given.

The ''Special Movement Education Program'' was prepared for the research with Faculty of Sport Science Teaching Members and The Teachers of Special Education School Physical Education. Program was administered 12 weeks, 3 days a week and 50-60 minutes a day.

Before and after practices, Eurofıt tests (25m speed test, flamingo balance test, touch to disks test, sit reach flexibility test, long jump with standing test, right-left hand grip force test, 30sec shuttle test, 30sec push-up test, vertical jump test, 10x5m shuttle running test) and Anthropometric tests (height and body weight) were applied.

The relation between first and last test was examined with ''t'' test and a level of significance $p< 0.05$ with taking the obtained data's arithmetic average(X), standard deviations(ss).

At the end of 12 weeks work process, same tests were done again as a last test.

3. Findings

Table 1: The Status of Girl Students' Age, Height, Weight and IQ Who Participated To Research

Age	N	%	Height	N	%	Weight	N	%	IQ	N	%
8	1	5,5	123-125	1	5,5	39-42	1	5,5	50-70	1	5,5
9	2	10,5	137-139	2	10,5	40-43	2	10,5	50-70	2	10,5
10	2	10,5	135-137	2	10,5	45-48	2	10,5	45-60	2	10,5
11	2	10,5	145-147	2	10,5	46-49	2	10,5	45-60	2	10,5
12	3	15	152-154	3	15	52-55	3	15	50-70	3	15
13	3	15	158-160	3	15	55-59	3	15	50-60	3	15
14	2	10,5	157-159	2	10,5	58-61	2	10,5	50-70	2	10,5
15	2	10,5	160-162	2	10,5	60-63	2	10,5	50-70	2	10,5
16	1	5,5	162-164	1	5,5	63-65	1	5,5	50-60	1	5,5

Table 2: Special Movement Education Program Which Was Applied in the Research

Weeks	Days	Aim	Content	Earnings
1	Saturday	Walking, running, jumping.	Walk straight, walk slalom, running straight, running slalom, standing jump, jumping while walking.	Ability to walk in balance, run and jump.
	Sunday	Holding, gripping, throwing.	Holding the ball, throwing the ball, holding the tennis ball, gripping and throwing, gripping and throwing the puff ball.	Ability to hold the subjects accurate and robust, grip and throw.
	Wednesday	Lying and rolling, turning the body.	Lying and rolling on the gymnastic matt, turning the body to the different ways.	Ability to move, rotate and roll the body on the ground.
2	Saturday	Walking, running,	Walk straight, walk slalom,	Ability to walk in

		jumping.	running straight, running slalom, standing jump, jumping while walking.	balance, run and jump.
	Sunday	Holding, gripping, throwing.	Holding the ball, throwing the ball, holding the tennis ball, gripping and throwing, gripping and throwing the puf ball.	Ability to hold the subjects accurate and robust, grip and throw.
	Wednesday	Lying and rolling, turning the body.	Lying and rolling on the gymnastic matt, turning the body to the different ways.	Ability to move, rotate and roll the body on the ground.
3	Saturday	Holding and throwing with hand, Holding and hitting with foot, throwing to target.	Holding the throwing ball and throw again, holding and tapping the rolling ball, throwing the ball to the target with hand and foot.	Ability to hold the different size and weight balls, control and throw.
	Sunday	Ball throwing to target with hand and foot.	Throwing the puff ball to target, throwing the tennis ball to target, throwing the football ball with foot to target.	Ability to hold the different size and weight balls with both hands and foot, control and throw.
	Wednesday	Moving on the gymnastic matt.	Tumble forward, rolling on a sloping matt.	Ability to tumble forward on the different thickness and hardness matts, roll on a sloping matt.
4	Saturday	Holding and throwing with hand, Holding and hitting with foot, throwing to target.	Holding the throwing ball and throw again, holding and tapping the rolling ball, throwing the ball to the target with hand and foot.	Ability to hold the different size and weight balls, control and throw.
	Sunday	Ball throwing to target with hand and foot.	Throwing the puff ball to target, throwing the tennis ball to target, throwing the football ball with foot to target.	To be Ability and weight balls with both hands and foot, control and throw
	Wednesday	Moving on the gymnastic matt.	Tumble forward, rolling on a sloping matt.	Ability to tumble forward on the different thickness and hardness matts, roll on a sloping matt.
5	Saturday	Rolling, climbing, walking in balance, leaping.	Rolling on the straight matt, climbing to high matt, walking on gymnastic line, leaping one leg, two legs on rope ladder.	Ability to roll on a balance and properly, climb, walk on a balance, leap.
	Sunday	Rolling, climbing, walking in balance, leaping	Rolling on the inclined matt, climbing to inclined matt, walking on gymnastic line, leaping one leg, two legs on rope ladder.	Ability to roll on a balance and properly, climb, walk on a balance, leap.

	Wednesday	Climbing, clinging and swinging.	Climbing to the fences, clinging to the bar and swinging in the ring.	Ability to Climb to the gymnastic fences, stand with clinging to the bar and swing in the ring.
6	Saturday	Rolling, climbing, walking in balance, leaping.	Rolling on the straight matt, climbing to high matt, walking on gymnastic line, leaping one leg, two legs on rope ladder.	Ability to roll on a balance and properly, climb, walk on a balance, leap.
	Sunday	Rolling, climbing, walking in balance, leaping.	Rolling on the inclined matt, climbing to inclined matt, walking on gymnastic line, leaping one leg, two legs on rope ladder.	Ability to roll on a balance and properly, climb, walk on a balance, leap..
	Wednesday	Climbing, clinging and swinging.	Climbing to the fences, clinging to the bar and swinging in the ring.	Ability to Climb to the gymnastic fences, stand with clinging to the bar and swing in the ring.
7	Saturday	Dribbling in the basketball, shooting, passing.	Working with sports-specific techniques.	Ability to perform skills specific to sport branches in accordance with the technique.
	Sunday	Dribbling in the football, shooting, passing.	Working with sports-specific techniques	Ability to perform skills specific to sport branches in accordance with the technique.
	Wednesday	leaping, jumping,	Leaping out into the desk, jump down from the desk.	Ability to leap out into the gymnastic desk, jump down from the gymnastic desk.
8	Saturday	Dribbling in the basketball, shooting, passing.	Working with sports-specific techniques	Ability to perform skills specific to sport branches in accordance with the technique.
	Sunday	Dribbling in the football, shooting, passing.	Working with sports-specific techniques.	Ability to perform skills specific to sport branches in accordance with the technique.
	Wednesday	leaping, jumping,	Leaping out into the desk, jump down from the desk.	Ability to leap out into the gymnastic desk, jump down from the gymnastic desk.
9	Saturday	Sportive educational games, Group exercises.	Exercises with educational games specific to sport branches.	Ability to hold the different size and weight balls with both hand and foot, control and throw.
	Sunday	Sportive educational games, Group exercises.	Exercises with educational games specific to sport branches.	Ability to roll on a balance and properly, climb, walk on a balance, leap.
	Wednesday	Rhythmic	Doing rhythmic moves with	Ability to do rhythmic

		movements, step.	music, climb up and climb down to step board.	moves with music in a group, climb up and climb down to step board as a group.
10	Saturday	Sportive educational games, Group exercises.	Exercises with educational games specific to sport branches.	Ability to perform skills specific to sport branches in accordance with the technique.
	Sunday	Sportive educational games, Group exercises.	Exercises with educational games specific to sport branches.	Ability to play games as a partner and as a group, obeying rules.
	Wednesday	Rhythmic movements, step.	Doing rhythmic moves with music, climb up and climb down to step board.	Ability to do rhythmic moves with music in a group, climb up and climb down to step board as a group.
11	Saturday	Sportive educational games, Group exercises.	Exercises with educational games specific to sport branches.	Ability to play games as a partner and as a group, obeying rules.
	Sunday	Sportive educational games, Group exercises.	Exercises with educational games specific to sport branches.	Ability to play games as a partner and as a group, obeying rules.
	Wednesday	Skill coordination tests.	Practice skill coordination tests in the gym.	Ability to apply skill coordination tests which is required strength, speed and skill in the gym
12	Saturday	Sportive educational games, Group exercises.	Exercises with educational games specific to sport branches.	Ability to play games as a partner and as a group, obeying rules.
	Sunday	Sportive educational games, Group exercises.	Exercises with educational games specific to sport branches.	Ability to play games as a partner and as a group, obeying rules.
	Wednesday	Skill coordination tests.	Practice skill coordination tests in the gym.	Ability to apply skill coordination tests which is required strength, speed and skill in the gym

Table 3: Students' Results of First and Last Tests and Level of Significance Who Participated to Research

TESs			**N**	**Minimum**	**Maximum**	**SS**	**P>0,05**
1	25m. Speed test	First test	18	**4,55**	**6,25**	**-,726**	**,467**
		Last test	18	**4,13**	**6,45**		
2	Flamingo balance Test	Firs test	18	16	38	-3,740	0,05
		Last test	18	34	46		
3	Touch to disks test	First test	18	**9,10**	**11**	**-,127**	**,642**
		Last test	18	**8,05**	**9,90**		
4	Sit reach flexibility test	Firs test	18	2,15	6,55	-3,727	0,05

		Last test	18	4,45	8,15		
5	Long jump with standing test	Firs test	18	45	65	-3,740	0,05
		Last test	18	65	85		
6	Right hand grip force test	Firs test	18	23	65	-3,744	0,05
		Last test	18	32	72		
7	Left hand grip force test	Firs test	18	**21**	**55**	**-,110**	**,912**
		Last test	18	**19**	**53**		
8	30sec shuttle test	Firs test	18	10	15	-3,835	,005
		Last test	18	17	22		
9	30sec push-up test	Firs test	18	7	11	-3,816	0,05
		Last test	18	9	13		
10	Vertical jump test	Firs test	18	18	25	-3,775	0,05
		Last test	18	27	34		
11	10x5m. shuttle running test	Firs test	18	**18**	**28**	**-,766**	**,218**
		Last test	18	**17**	**27**		

3.1 Analysis

The obtained data were analyzed with SPSS.16 program and with finding the values of significance, with SS minimum and maximum values and arithmetic average were interpreted.

4. Findings and Results

As a result of first and last test of research; the significant data were obtained in first and last test results of Eurofit tests which are flamingo balance test, sit reach flexibility test, long jump with standing test, right hand grip force test, 30 sec shuttle test, vertical jump test, 30 sec push-up test.

Generally, in exercise practices which were done within special movement education program which is applied in the research repeats were done in the direction of students' wishes. In practices, being reluctant in speed exercises, doing exercises and movements slowly, using mostly right hand prevented to reach the significant results in applied tests of 25m speed test, touch to disks test, 10x5m shuttle test, left hand grip force test. ($p>0.05$)

In the research (6) of ''The Effect of Physical Activities on Balance and Force Parameters in Children with Autism Spectrum Disorder'' which is related our research it has been detected that 12 weeks physical activity has significant effects on children's motor skills who have autism spectrum disorder.

Also in the study (7) of ''An Investigation of The Effect of In-Winter Exercises Which Is Done To Cerebral Palsy Children To Cerebral Palsy Children's Thin And Rough Motor Skills And Life Qualities'' , the significant difference has been found in students' rough motor skills and life qualities who participated to exercise program and comparison between groups. ($p<0.05$) According to these results, it is expressed that in-water exercise program make positive effects to cerebral children's motoric development and life qualities.

In another research (8) which is searched about ''The Relation between Dynamic Balance and Body Stability in Children with Down syndrome and Adolescents'' body stability has significant effect on dynamic balance in DS children and Adolescents. It is expressed that developing the body mass endurance contributes to balance development in DS children and Adolescents.

In studies of Investigation of Some Descriptive and Experimental Studies on Physical and Motor Suitability in Down syndrome (9), it has been detected that the body composition, muscle strength and aerobic capacity parameters were examined most frequently. As a result, it is observed that in researches which are done on physical suitability of DS people have a significant increase in the last 5 years.

As a result, it can be said that the special prepared movement program, exercise and training programs which are applied to children who have a learning disability, need mentally special education, have different mental problems(down syndrome, autism etc.) contribute positively to individual's psycho-motor properties.

References

1. Eripek, S. ve ark. (1998). Özel *Eğitim*. Anadolu Üniversitesi Açık Öğretim Fakültesi Yayınları 561, Eskişehir 1998.
2. Şen, C. İnce, G. (2007*). Türkiye'deki Özel Eğitim Kurumlarında Uygulanan Beden Eğitimi Derslerinin Durumunun İncelenmesi,* 5. Ulusal Beden Eğitimi ve Spor Öğretmenleri Sempozyumu, 2-3 Kasım 2007.Adana.
3. Cratty, M. Bryant, J. (2004). *Adapten Physical Education: Self-Control and Attention. Focus on Exceptional Children*, v 37, n,3:pl-8 (EJ 758036).
4. Ninot, G. Bilard, J. Delignieres, D. (2005). *Effects of Integrated or Segregated Sport Participation on the Physical Self for Adolescents with Intellectual Disabilities*. Journal of Intellectual Disability Research, v: 49 n: 9, p;682-689 (EJ718423).
5. Nolan, J. Duncan, C; Hatton, V. (2000*). Comparison of Pre-Service Physical Educators' Attitudes toward Individuals with Disabilities before and after* Adapted Physical course Work. P 11. (ED467480).
6. Işık, M. (2016*). Otizm Spectrum Bozukluğu Olan Çocuklarda Fiziksel Aktivitelerin Denge ve Kuvvet Parametreleri Üzerine Etkisi.* 14 th Internatıonal Sports Sciences Congress, 01-04 November, Antalya.
7. Uzuner, M.E., Aydın, M., Çekmece, Ç., Bingül, B.M., Özgür, B.O. (2016). *Serebral Palsili Çocuklara Yaptırılan Su İçi Egzersizlerinin İnce ve Kaba Motor İle Yaşam Kalitelerine Etkisinin İncelenmesi.*14 th Internatıonal Sports Sciences Congress, 01-04 November, Antalya.
8. Özmen, T., Ünal, C.M. (2016). *Down Sendromlu Çocuk Ve Adölesanlarda Dinamik Denge ve Gövde Stabilitesi Arasindaki İlişki*. 14 th Internatıonal Sports Sciences Congress, 01-04 November, Antalya.

9. Sansi, A., Özer, D., Şahin, H.M. (2016). *Down Sendromlu Bireylerde Fiziksel ve Motor Uygunluğa Yönelik Yapılan Bazı Betimsel Ve Deneysel Çalışmaların İncelenmesi.* 14 th Internatıonal Sports Sciences Congress, 01-04 November, Antalya.